

CHAPTER EIGHT

LAND AND RESOURCE MANAGEMENT

GENERAL

Land management in Carbon County involves a combination of activities such as:

- Resource, economic, land use, and infrastructure planning;
- Regulation of proposed land uses; and,
- Monitoring of land uses and resources.

Planning activities are performed by private landowners, industry, and governmental agencies. In their use of the land, private landowners, e.g., ranchers and other industry representatives, monitor resources such as rangelands and extracted minerals to increase the efficiency and profitability of economic activities, and conserve the natural resources that will be required to support future economic activities. In contrast, governmental agencies typically review and evaluate resources to identify the general suitability of lands to support various land uses, protect selected water and wildlife resources, and determine the compatibility of proposed land uses with various resource management objectives. Local government also evaluates proposed land uses in terms of their compatibility with adjoining land uses, natural resources, infrastructure and the perceived desires of the general community.

The future management of lands and resources in Carbon County will impact the type and scope of future land uses in the County, as well as focus the direction and scope of future resource conservation efforts. Four federal agencies and three State agencies have administrative responsibility for almost 3.0 million of the roughly 5.1 million acres in Carbon County. The County has the authority to zone land uses on privately-owned lands in the unincorporated areas of Carbon County. In this context, it is essential that a cooperative approach to future land management is required.

While cooperative land management efforts are needed, it is also important to note that eight governmental agencies manage lands in Carbon County; each has separate statutory and regulatory mandates. They report to different administrations and elected leaders. In turn, management objectives and approach vary considerably. A general understanding of these differences are important to appreciate as the County pursues a cooperative working relationship with appropriate State and federal agencies.

In the following paragraphs, the general responsibilities of the primary State and federal agencies that administer lands in Carbon County are briefly summarized. The discussion of these responsibilities focuses primarily on those responsibilities that are significant to the management of natural resources, economic activities, and land uses in Carbon County. The mandates associated with cooperative land management responsibilities are also highlighted.

Chapter Eight also addresses the relevant land and resource management activities that are carried out by County government, as well as the 10 municipalities in Carbon County. This evaluation and related recommendations is presented to help increase the effectiveness and efficiency of ongoing land use management activities. Specific recommendations include, in part, the identification of a County land and resource management process that will help facilitate more meaningful coordination with appropriate State and federal agencies.

U.S. FOREST SERVICE

General

Within Carbon County, the U.S. Forest Service has responsibility for the management of lands and resources within the Medicine Bow-Routt National Forest (MBRNF). The MBRNF inside Carbon

County includes about 632,748 acres (State Department of Administration and Information, Division of Economic Analysis, 1996).

The U.S. Forest Service Region 2 office in Denver, Colorado administers the Medicine Bow-Routt National Forest. The forest supervisor, who holds ultimate responsibility for the Medicine Bow-Routt National Forest, is based in Laramie, Wyoming. Under the supervisor's direction, there are six management districts. A district ranger manages each of the six districts.

The Brush-Hayden district is the only management district in Carbon County. The district ranger of the Brush-Hayden district is based at the U.S. Forest Service office in Saratoga. About 25 Forest Service personnel are located in the Brush-Hayden district offices in Saratoga and Encampment (Carroll, 1997).

General Scope of Authority for Land and Resource Management

Forest Service representatives indicate that their management responsibilities are guided by some 200 different federal statutes and regulations (Schmidt, 1997). These statutes and regulations provide authority and responsibility for the management of, at least, the following resources inside the MBNF:

- recreational, cultural and visual resources;
- wilderness areas that have been designated via the federal Wilderness Act of 1964;
- fish and wildlife habitat;
- range resources;
- timber; and,
- water quality.

Related resource management considerations include a wide variety of issues such as public access, recreational opportunities, timber harvests, fire suppression, forest health, erosion and sedimentation, and the preservation of endangered species.

"Administration of the national forests is guided primarily through four laws:

- *the Multiple Use-Sustained Yield Act which established the multiple-use and sustained-yield policies for management of the national forests;*
- *the National Environmental Policy Act which committed the federal government to a policy of creating and maintaining "conditions under which man and nature can exist in productive harmony;"*
- *the Forest and Rangeland Renewable Resources Planning Act which called for preparation of a strategic plan for all Forest Service activities every five years based on an assessment of renewable natural resources on all land ownership every ten years; and,*
- *the National Forest Management Act which provided standards and guidelines for national forest planning and management (U.S. Forest Service, Legislative Affairs Office, 1993).*

The management responsibilities of the U.S. Forest Service are primarily derived from legal interpretations of the preceding and other federal statutes that are brought into law by the U.S. Congress and the President of the United States. Once authorized by the executive and legislative branches of the U.S. Government, legal interpretations are subsequently made by Forest Service personnel in Washington, D.C. concerning how existing Forest Service management policies and activities need to be changed. Required or desired changes in management are typically reflected through the Forest Service's preparation of new agency regulations that are published in the Federal Register for public review. After adoption at the Washington level, the U.S. Forest Service distributes new regulations to its regional and district offices in the form of manuals or handbooks. Regional and district offices are permitted and encouraged to make regulations more specific and/or more stringent. However, new regulations cannot be altered to make them less stringent (Sanderson, 1997).

A growing number of federal statutes and related legal interpretations by the U.S. Service continually widen the type and scope of management responsibilities for the U.S. Forest Service. Some new management responsibilities are required by law; others are self-imposed. The process used by the

U.S. Forest Service to implement new agency regulations also provides some discretion in land and resource management at the regional, forest, and district office levels. Discretion that is permitted at the district office level provides district rangers with the opportunity to impose a more stringent interpretation of agency guidelines. Greater flexibility to district rangers is considered desirable; however, the ability to only make regulations more stringent encourages a potential imbalance in resource management.

Land and Resource Management Concerns of Carbon County

The Lack of Economic Considerations in Resource Management Decisions

One of the prominent environmental goals expressed in the National Environmental Policy Act (NEPA) is to:

“achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life’s amenities” (NEPA, Section 101(5)).

Carbon County shares the vision that a balance between resource conservation and economic development is the most prudent approach to land and resource management. Further, the County is committed to the pursuit of land management activities and policies that foster a practical balance of resource conservation and economic development.

Some Forest Service decisions relating to the Medicine Bow-Routt National Forest have moved the pendulum of balance significantly toward resource conservation and increasingly away from any serious consideration of the consequences of Forest Service decisions, e.g., timber sales or grazing permits, upon the Carbon County economy. In 1996 and 1997, the County Department of Planning and Development has observed that the content of environmental assessments and impact statements frequently avoid any substantive evaluation of the impact of U.S. Forest Service decisions upon the regional County economy and affected communities. Some staff personnel indicate that Forest Service manuals permit personnel to only review and evaluate available information in the preparation of environmental impact statement documents.

Annual volumes of timber harvests have steadily continued to diminish since 1989. For example, only 4.8 million board feet (MMBF) of raw sawtimber were harvested from the entire Medicine Bow National Forest in FY 1995 (U.S. Forest Service, 1996). This decision was reached even though the U.S. Forest Service was made aware by the timber industry that local mills in Carbon County are economically dependent upon the annual harvest of about 33 MMBF to sustain full-time production at both the Louisiana-Pacific Corporation and Hammer mill operations (Slater, 1996 and 1997; Reedy, 1997).

A recent timber sale action plan suggests that the U.S. Forest Service may pursue the implementation of several timber sales in the Medicine Bow-Routt National Forest during the next five years. The Forest Service plans to offer no more than 23 MMBF for the entire five-year period (U.S. Forest Service, Medicine Bow National Forest, 1997). While Carbon County is pleased that the Forest Service is contemplating additional timber sales, the anticipated volume of proposed timber harvests does not begin to approach the volumes needed to adequately support the operation of the two mills in Carbon County. In this context, Carbon County recommends that the U.S. Forest Service, MBNF, work cooperatively with Carbon County to identify lands that are suitable for the commercial harvest of sawtimber and adequate to sustain the operation of the local timber industry.

U.S. Forest Service decisions have had a significant impact upon the economy of Carbon County. The economic impacts associated with reduced timber harvests are most significant in the communities of Encampment, Saratoga, and Medicine Bow that are more reliant upon the availability of raw timber for commercial timber harvests and the production of wood products. The \$8.8 million in annual direct expenditures by the local timber industry also generates another 144 indirect jobs and over \$2.0 million in indirect expenditures in the Carbon County economy. Consequently, the impact of decreased timber harvests and related production is felt throughout the service sector of the economy and impacts virtually all 10 communities in Carbon County.

Carbon County believes that a cooperative effort between the U.S. Forest Service and Carbon County should be made to determine more effective methods to evaluate potential economic impacts that are associated with proposed timber sale projects.

Deviation from the Existing Land and Resource Management Plan for MBNF

The National Forest Management Act of 1976 requires each National Forest System unit to prepare an integrated, comprehensive land management plan, at least, every 15 years. The current plan was adopted in October, 1985. Consequently, an updated land and resource management plan is required for completion by the year 2000 (U.S. Forest Service, 1976).

The existing Land and Resource Management Plan outlines a variety of goals for resource conservation, water quality, wilderness areas, recreation, timber harvest, range, land use and ownership, facilities, transportation and other relevant forest planning issues. The following are the two U.S. Forest Service goals that are associated with timber harvesting:

“Provide for timber harvest to support local dependent industries and management of the many Forest resources in a manner that meets silvacultural needs of timber species, places timber stands under management, minimizes timber management costs, and supplies wood products to meet national needs”.

“Treat vegetation to provide a Forest environment for the uses emphasized and compatible with the Management Area objectives”.

The measurable objective that related to the preceding goal for timber harvests was an annual allowable sale quantity (ASQ) of roughly 27.3 to 29.3 million board feet of live-green sawtimber, approximately 5 million board feet of smaller-diameter live trees for post and poles, and about 22,400 cords of firewood from clearcuts or from dead trees in the Forest. Between 1986 through the year 2000, the management objective was to harvest the following types of timber from the Medicine Bow National Forest:

- 439.5 million board feet of live, green sawtimber;
- 75 million board feet of smaller diameter live trees for post and pole uses; and,
- 336,000 cords of firewood.

The volume of timber to be sold by the U.S. Forest Service for commercial harvest was not to exceed the total ASQ for the Medicine Bow National Forest. In addition, the ASQ was not to deviate five percent more or less from the adopted management objective.

From a resource management perspective, the planned timber sales and related commercial harvests represented 10 years of vegetative treatments that were designed to improve forest health and support other uses of the Forest. In essence, the planned harvest of roughly 266.8 MMBF was to include:

- 5,249 acres of intermediate cuts;
- 21,255 acres of clear cuts,
- 6,750 acres of shelterwood seed cuts;
- 2,282 acres of shelterwood removal cuts, and,
- 11,637 acres of modified group shelterwood cuts.

The U.S. Forest Service determined that the intended use of clear cutting and shelterwood harvest methods was appropriate for the management of roughly 80 percent of the Aspen, Lodgepole Pine, Spruce/fir, Ponderosa Pine, and Mixed Conifer species that are contained in the Medicine Bow National Forest (U.S. Forest Service, 1985). The Forest Plan explains that these management approaches were selected because of several important forest characteristics and management issues:

- *Most of the Forest is susceptible to strong winds;*
- *Most existing lodgepole pine stands on the Forest are infected with dwarf mistletoe;*
- *Most of the reforestation on the Forest is achieved by natural regeneration;*
- *Infrequency of good to excellent cone crops in spruce/fir and the timing necessary to provide an adequate seed bed when a good seed year occurs;*
- *Slash disposal site preparation and damage to residual stands; and,*
- *The inability of spruce/fir to regenerate naturally in open sunlight.*

In terms of actual implementation, the U.S. Forest Service sold and awarded approximately 176.5 MMBF of live, green sawtimber from the Medicine Bow National Forest between FY 1986 and FY 1997. In addition, some 275.2 MMBF were harvested during the same 11-year period.

Annual management objectives for timber harvests (27-29 MMBF) were attained between FY 1987 and FY 1992 (Table 4-2). The volume of timber sales and related timber harvests in the Medicine Bow National Forest has declined dramatically since FY1993 (Figure 4-2) and fallen considerably short of Forest Plan objectives. These declines have occurred despite the fact that lands, which have been identified by USFS as suitable for timber harvest, have an annual sustainable yield of 70.2 MMBF (U.S. Forest Service, 1985).

Carbon County has two principal concerns relating to the decline in timber sales from the Medicine Bow-Routt National Forest:

- sustained forest health; and,
- sustained economic viability of Carbon County's timber industry.

The use of clear cutting and shelterwood harvest methods are important to achieving effective vegetative management. Such management is required to sustain desirable forest health. In the absence of increased timber sales and related commercial harvests, Carbon County believes that the Medicine Bow-Routt National Forest may be impacted by:

- increased susceptibility of Forest timber stands to significant mountain pine beetle outbreaks; and,
- increased forest fire potential.

The economic viability of the timber industry in Carbon County is potentially impacted by continued fluctuations in the raw timber inventories that will be available at the Louisiana-Pacific Corporation mill in Saratoga, the Hammer Mill in Encampment, and the Western Wood Products post and pole operation in Medicine Bow. Any potential closures or labor cutbacks by these operations will diminish the economic stability of Saratoga, Encampment, Medicine Bow, and other communities of Carbon County.

Under Section 219.10(e) of the Code of Federal Regulations, a forest supervisor may change proposed implementation schedules that are associated with forest plans. Some changes can understandably be expected in light of differences between annual operating budgets and the actual level of appropriated funds. However, if such changes represent significant amendments to a forest plan, the forest supervisor may either amend the existing forest plan or prepare a plan revision. In either case, the forest supervisor is required to follow the procedures that are normally used for the development and approval of a forest plan.

In view of the significant deviation from the current Forest Plan, Carbon County requests the U.S. Forest Service to update its existing Forest Plan as soon as possible. In this process, Carbon County expects an opportunity to become an active participant in all phases of the planning process associated with the Forest Plan update. Unlike the other counties that adjoin the Medicine Bow-Routt National Forest, the economy of Carbon County is significantly more dependent upon the continued viability of its timber industry.

Future Coordination with the U.S. Forest Service

In the foreseeable future, it is apparent to Carbon County that there are, at least, four areas of coordination that are required to facilitate more meaningful local participation in land and resource management decisions. These areas include, at least, the following:

- grazing permits and related allotment management plans;
- environmental assessments and impact statements associated with timber sales, wilderness areas, fish and wildlife resources, water quality improvement projects, as well as other resource conservation and management projects;
- land exchanges; and,
- future amendments or revisions to the existing Forest Plan for the Medicine Bow-Routt National Forest.

Grazing Permits and Related Allotment Management Plans

The U.S. Forest Service issues grazing permits to Carbon County ranchers who wish to use federal land for the grazing of their cattle. Existing permittees, who already have a permit to use federal lands for cattle grazing, are regularly monitored by Forest Service personnel from the Brush-Hayden district. A permittee's use of allotted federal land and the ever-changing condition of the range are evaluated in the context of allotment management plans. An allotment plan is prepared by U.S. Forest Service personnel for each grazing allotment in consultation with each permittee. The allotment plan outlines a specific program of action for achieving various resource management objectives on the land being leased from the Forest Service.

Discussions with Forest Service personnel indicate that the Brush-Hayden district personnel are particularly concerned with the stubble height of grasses, the availability of adequate forage and habitat for big game animals, the maintenance of desirable water quality, the preservation of important raptor sites, and other important resource management objectives (Safranek, 1997). While many issues are incorporated into allotment management plans, the requirements for sustaining the economic viability of local ranches is frequently absent (Adams, 1997; Reynolds, 1997) from most allotment plans in the Brush-Hayden district. This void in resource management is contrary to the U.S. Code of Federal Regulations. CFR 222.1 requires that each allotment plan prescribe, in part, how livestock operations will be conducted in order to meet the multiple-use, sustained yield, economic, and other objectives for each allotment.

At the same time, one of the greater challenges of the U.S. Forest Service resource managers is to encourage reduced grazing pressure in more sensitive areas, e.g., riparian areas, within each grazing allotment. Livestock that graze on public lands frequently concentrate in selected areas of a given allotment. Unless livestock are occasionally dispersed to other areas, the recovery of grasses and other vegetation is sometimes hampered (Carroll, 1998). To facilitate greater cooperation, Carbon County recommends that the U.S. Forest Service occasionally hold informal workshops with the grazing permittees in Carbon County. Such workshops should, at least, include the presentation and discussion of economical livestock techniques, range improvements, monitoring techniques that will help promote the maintenance of healthy rangelands in the County.

Coordination of Grazing Permit Actions with State Conservation Districts, County Agricultural Extension Agent, and Natural Resource Conservation Service

Many ranchers prefer to work directly with the U.S. Forest Service, Brush-Hayden District, concerning changes in stipulations concerning existing grazing permits. However, Carbon County envisions that the State Conservation Districts, i.e., Little Snake River, Saratoga-Encampment-Rawlins, and Medicine Bow, the County Agricultural Extension agent, and local Natural Resource Conservation Service (NRCS) representative will take a more aggressive role to ensure more effective coordination with Carbon County livestock ranchers and a balanced consideration of resource conservation issues. Carbon County desires that these agencies will:

- receive notices of proposed revisions to individual grazing permit stipulations, proposed allotment management plans, and proposed permit cancellations;
- evaluate proposed modifications to existing grazing permits, allotment management plans associated with a new permit, or a proposed permit cancellation;
- discuss USFS proposals with a representative(s) of the affected ranch; and,
- if desired by the affected rancher and/or USFS, participate in a joint meeting between ranch representative(s), USFS, the County Extension agent, the State Conservation District, and the local NRCS representative to discuss and mediate any unresolved issues.

Appeals Process

If an acceptable collaborative decision cannot be reached for a given grazing permit, ranchers in Carbon County have the opportunity to use and participate in a state appeals process that is sponsored by the Wyoming Department of Agriculture and authorized by Section 8 of the Federal Land Policy Management Act. Some use has been made of the process, but the existing State process has not yet been formally approved and adopted by the federal agencies.

If future uses of the State-sponsored appeals process become ineffective, Carbon County should establish a local appeals process in cooperation with the U.S. Forest Service and the U.S. Bureau of Land Management.

Review of Environmental Assessments and Impact Statements

Carbon County regularly receives documented invitations from the U.S. Forest Service to comment on a wide variety of environmental assessments and impact statements that are associated with a wide variety of timber sales, resource management projects, land exchanges, and other conservation programs of the U.S. Forest Service. In recent years, Carbon County has responded to many of these solicitations for comments.

In order to enhance its communication of specific project issues and concerns, the Carbon County Board of County Commissioners will continue to review and respond to incoming environmental assessment and impact statement documents. The Board of County Commissioners may solicit technical support in these efforts. However, the Board of County Commissioners will remain as the primary point-of-contact with all federal agencies that operate in Carbon County.

Land Exchanges

The U.S. Forest Service and private landowners occasionally desire to exchange private lands within or outside of Carbon County for federal lands that are within or outside of Carbon County. For example, the Albany Industrial Cabin Owners Association (AICOA) traded private lands outside of Carbon County in order to gain ownership of lands near Elk Mountain where several private cabins were located on federal lands. During its negotiation with AICOA, appropriate Brush-Hayden district personnel contacted the Carbon County Department of Planning and Development to identify County concerns and determine any procedural requirements that would be required by the Carbon County Planning Commission.

It is believed that this approach by the U.S. Forest Service represented an effective approach for coordinating the land exchange with Carbon County. Given the recent success of this approach, the Carbon County Department of Planning and Development will remain the point-of-contact for the U.S. Forest Service. It is also recommended that the Carbon County Planning Director will jointly meet with the appropriate Forest Service personnel and the applicant(s) early in the exchange process to identify and discuss any potential rezoning or subdivision requirements.

Forest Plan Amendments and/or Revisions

The Forest and Rangeland Renewable Resources Planning Act of 1974 requires the U.S. Forest Service to coordinate its land and resource management plans with local and state government. Other relevant regulations of the Forest Service provide more specific guidance concerning such coordination.

In 36 CFR 291.7 requires that the responsible line officer for a given planning effort will review the planning and land use policies of local, state, and federal agencies. In essence, the Forest Service is required, in part, to identify potential conflicts between a proposed agency action and the objectives of any land use plan of local government. The results of this review are to be incorporated in the environmental impact statement for any plan that is developed by the U.S. Forest Service (40 CFR 1502.16(c)). This regulatory requirement provides one important reason Carbon County prepared this County Land Use Plan.

The Carbon County Department of Planning and Development recently participated in the development and evaluation of a resident survey that will be distributed by the U.S. Forest Service to a small sample of residents in Albany, Platt, Converse, and Carbon Counties. Recent meetings with selected Forest Service personnel and the County planner have also been fruitful. However, a more substantive dialogue is required to adequately convey land and resource management issues associated with the upcoming revision of the forest plan for the Medicine Bow-Routt National Forest. Carbon County desires to be a part of the entire planning process in order to gain a better understanding of appropriate resource management issues, help identify practical resource management alternatives, and convey usable data and information that would be useful to the preparation of the Forest Plan update.

The forest supervisor for the Medicine Bow-Routt National Forest has proposed a collaborative planning process with representatives of selected State agencies and the four affected counties. A specific approach that is envisioned for this process was not identified by the U.S. Forest Service. The County Planning Commission recommends that a technical advisory board be established that is comprised of selected State agency and county interests. The Planning Commission envisions that an effective use of the technical advisory board should include, at least, the following responsibilities:

- Review the objective, scope, and methodology of each primary planning task before data evaluations are undertaken by the U.S. Forest Service planning team;
- Review and recommend revisions to draft USFS evaluations that are completed for each primary planning task;
- Participate in the identification and recommendation of alternate plans that are associated with each primary planning task; and,
- Participate in public hearings and the assessment of community concerns, issues and priorities.

The Board of County Commissioners should assign, at least, one representative to participate in the collaborative planning process with the U.S. Forest Service. The representative should provide regular reports to the Board of County Commissioners, the Carbon County Planning Commission, and other County agencies. The County representative should, in turn, convey the cumulative concerns of Carbon County to the technical advisory board for consideration.

BUREAU OF LAND MANAGEMENT

General

The U.S. Bureau of Land Management (BLM) is a federal agency within the Department of Interior. BLM manages all public lands that have not been assigned to other federal agencies, e.g., National Park Service.

The headquarters of the Bureau of Land Management are located in Washington, D.C. However, most of its employees work in field offices in 12 western states. In Wyoming, there is one state office in Cheyenne, Wyoming, four district offices, and 10 resource management areas.

Some two million acres of public land within Carbon County are managed by BLM's Rawlins District office. The director of the Rawlins District office has overall administrative responsibility for the Great Divide and Lander Resource areas. The area manager of the Great Divide Resource area that encompasses BLM lands in Carbon, Sweetwater, Albany, and Laramie counties. Some 75 BLM personnel are based at the Rawlins District Office in Rawlins, Wyoming.

General Scope of Authority and Objectives for Land and Resource Management

The U.S. Bureau of Land Management (BLM) was established in 1946 during a reorganization of the federal government. BLM is a successor to two former federal agencies: the General Land office and the U.S. Grazing Service.

Various federal statutes authorize the activities of BLM. Some of these statutes, e.g., the U.S. Mining Law of 1872 and Taylor Grazing Act of 1934, preceded the establishment of the agency. The most comprehensive statute is the Federal Land Policy and Management Act of 1976 (FLPMA). All policies, procedures and management actions of BLM must be consistent with FLPMA and other laws that govern the use of public lands.

The general resource management objectives of BLM are as follows:

- *“Provide for a wide variety of public land uses without compromising the long-term health and diversity of the land and without sacrificing significant natural, cultural, and historical values.*
- *Understand the arid, semi-arid, arctic and other ecosystems it manages and commit to using the best scientific and technical information to make resource management decisions.*
- *Resolve problems and implement solutions in collaboration with other agencies, states, tribal governments, and the public.*
- *Understand the needs of rural and urban publics and provide them with quality service.*
- *Maintain a skilled and highly professional work force.*
- *Clearly define and achieve objectives through the efficient management of financial, human, and information resources.*
- *Efficiently and effectively manage land records and other spatial data.*
- *Recover a fair return for the use of publicly-owned resources and reduce long-term liabilities for the American taxpayer” (Bureau of Land Management, 1996).*

While the resource management responsibilities and objectives of the Bureau of Land Management are derived from various federal statutes, the general orientation of the agency is to promote multiple uses of public lands. Further, the objectives of the agency also suggest a strong interest to coordinate decisions with affected interests and local governmental agencies.

Land and Resource Management Concerns of Carbon County

The Integration of Economic Considerations in Resource Management Decisions

As stated earlier, Carbon County shares the vision that a balance between resource conservation and economic development is the most prudent approach to land and resource management. Further, the County is committed to the pursuit of land management activities and policies that foster a reasonable balance between resource conservation and economic development.

Informal discussions with Carbon County ranchers, representatives of oil, gas, and mining industries, and other local government representatives suggests that the primary orientation of Rawlins District personnel is the conservation of wildlife and aquatic habitat and water resources. Less consideration is given to the economic impacts that are associated with revisions to allotment management plans. The content of environmental assessments and impact statements frequently do not contain any substantive evaluation of the impact of Bureau of Land Management decisions upon the economic viability of individual ranch operations and their cumulative impact upon the regional economy.

Through discussions with various Rawlins District personnel, Carbon County has learned that BLM's Rawlins District Office is usually willing to listen, expand the scope of project considerations, and seek constructive ways to address project concerns. These desirable qualities should be accompanied with the retention of staff or consultant capabilities at the Rawlins District Office that are able to address economic issues on a regular basis.

The Bureau of Land Management recently completed its Southwest Evaluation Study, in cooperation with the University of Wyoming, School of Agriculture. The study, in part, evaluates economic conditions in Carbon, Lincoln, Sublette, Sweetwater, and Uinta Counties. In addition, Chapter Four of the Carbon County Land Use Plan provides a more specific evaluation of the Carbon County economy. These two information sources should help Rawlins District personnel to more effectively evaluate the potential economic consequences of future resource management decisions.

Future Coordination with the Bureau of Land Management

In the foreseeable future, there are, at least, four areas of coordination that are required to facilitate more meaningful local participation in land and resource management decisions. These areas include, at least, the following:

- resource management decisions that impact vehicular road access;
- cooperative resource management planning;
- land exchanges; and,
- the review of environmental assessments and impact statements associated with all resource management decisions.

Coordination with Grazing Permittees

Title IV, Section 402 of the Federal Land Policy and Management Act of 1976 provides BLM with the authority to issue, modify, suspend or cancel grazing permits. These permits typically authorize grazing activity on public lands.

The Bureau of Land Management may complete an allotment management plan for a given grazing permit in consultation with the permittees involved. BLM may also establish terms and conditions with a given permit. In addition, BLM is to specify the number of animals that can be grazed on the permitted lands, as well as identify seasons of use. The examination of the permitted rangelands by BLM can be made at any time; such evaluations can lead to an adjustment in the amount and manner of use.

These requirements and the resource management objectives of BLM suggest that BLM seeks a collaborative approach to resource management. Otherwise, BLM decisions from the Rawlins District Office will only reflect national agency guidelines and not take into consideration the regional differences associated with Carbon County and the resource management experience of local ranchers.

Results from Carbon County's Ranch Survey indicate that about 44 percent of Carbon County ranchers would like to see a change in the relationship between permittees and BLM and the U.S. Forest Service. Carbon County believes that range conservationists or other BLM personnel, who work closely with Carbon County ranchers, need to listen more to the concerns, experience, and management approaches that may be suggested by local ranchers. While BLM personnel have desirable academic and professional field experience, these experiences are frequently considerably less than the extensive livestock and resource management experience of many local ranchers. When BLM receives useful information via discussions with local ranchers, effective approaches need to be incorporated into revised allotment management plans or modifications to grazing permit stipulations. At the same time, local ranchers in Carbon County need to continually seek technical assistance from the County Agricultural Extension agent, the State Conservation Districts, and the Natural Resource Conservation Service (NRCS) to remain aware of appropriate best management practices.

Similar to the U.S. Forest Service, one of the greater challenges of BLM resource managers is to encourage reduced grazing pressure in more sensitive areas, e.g., riparian areas, within each grazing allotment. Livestock that graze on public lands frequently concentrate in selected areas of a given allotment. Unless livestock are occasionally dispersed to other areas, the recovery of grasses and other vegetation is sometimes hampered. To facilitate greater cooperation, Carbon County recommends that the U.S. Bureau of Land Management also hold informal workshops with the grazing

permittees in Carbon County. Such workshops should, at least, include the presentation and discussion of economical livestock techniques, range improvements, monitoring techniques that will help promote the maintenance of healthy rangelands in the County.

*Coordination of Grazing Permit Actions with State Conservation Districts,
County Agricultural Extension Agent, and Natural Resource Conservation Service*

Many ranchers prefer to work directly with the Bureau of Land Management concerning changes in stipulations concerning existing grazing permits. However, Carbon County envisions that the State Conservation Districts, i.e., Little Snake River, Saratoga-Encampment-Rawlins, and Medicine Bow, the County Agricultural Extension agent, and local Natural Resource Conservation Service (NRCS) representative will take a more aggressive role to ensure more effective coordination with Carbon County livestock ranchers and a balanced consideration of resource conservation issues. Carbon County desires that these agencies will:

- receive notices of proposed revisions to individual grazing permit stipulations, proposed allotment management plans, and proposed permit cancellations;
- evaluate proposed modifications to existing grazing permits, allotment management plans associated with a new permit, or a proposed permit cancellation;
- discuss BLM proposals with a representative(s) of the affected ranch; and,
- if desired by the affected rancher and/or BLM, participate in a joint meeting between ranch representative(s), BLM, the County Extension agent, the State Conservation District, and the local NRCS representative to discuss and mediate any unresolved issues.

Appeals Process

If an acceptable collaborative decision cannot be reached for a given grazing permit, ranchers in Carbon County have the opportunity to use and participate in a state appeals process that is sponsored by the Wyoming Department of Agriculture and authorized by Section 8 of the Federal Land Policy Management Act. Some use has been made of the process, but the existing State process has not yet been formally approved and adopted by the federal agencies.

If future uses of the State-sponsored appeals process become ineffective, Carbon County should establish a local appeals process in cooperation with the U.S. Bureau of Land Management and the U.S. Forest Service.

*Participation in Resource Management Decisions
that Impact Vehicular Road Access*

Numerous resource management decisions of the Bureau of Land Management will continue to impact the vehicular use of federal, State, and County roads and trails within Carbon County. Vehicular road access decisions are associated with oil and gas industry applications for permits to drill, proposed recreation plans, right-of-way permits, mining, land acquisitions, and other land uses on federal lands. However, such decisions are frequently intertwined with the use of roads and trails that are owned by Carbon County and the State of Wyoming.

The use or closure of existing roads and trails usually impacts other considerations such as public access, recreation, the economy, future land uses, and wildlife conservation. All of these issues are very relevant to Carbon County.

For example, the County Road and Bridge Department must be aware of proposed oil and gas permits to drill. Many of these applications assume use of both federal and County roads for vehicular access. Without the County's knowledge of these permit applications, the opportunity to include necessary road improvements or use criteria cannot be incorporated into the BLM permit stipulations. Further, the absence of this information hinders the Road and Bridge Department's ability to anticipate, schedule and budget the construction of cooperatively financed roadway improvements that otherwise could facilitate the proposed use and the long-term maintenance of a given roadway. In response to a request by the Carbon County Department of Planning and Development in early 1997, the Area

Manager for the Great Divide Resource Area subsequently authorized the regular transmittal of proposed applications for permit to drill to the Carbon County Department of Planning and Development. This information is now regularly forwarded to the County Road and Bridge Department for their evaluation and comment.

Vehicular access decisions on federal lands, e.g., BLM lands within the “checkerboard”, that impact adjoining private lands represent an important concern of Carbon County. For example, the past division and more recent sale of larger land parcels into smaller 35-160 acre parcels could gradually generate a significant impact upon the public services of Carbon County. Recent discussions with the Area Manager of the Great Divide Resource Area indicate that the Rawlins District Office is considering one or more land exchanges in the vicinity of Separation Flats. It is very important that Carbon County be involved in any future decision-making process. While the EIS process provides the County to offer a formal response to such an exchange, the complexity of some BLM decisions such as this require consultation with the Carbon County Board of Commissioners prior to BLM’s preparation of an environmental assessment or impact statement.

Participation in Cooperative Resource Management Planning

The Bureau of Land Management periodically undertakes the preparation of more specific area development plans. The Rawlins District Office, for example, inventoried and evaluated vehicular access on Shirley Mountain in recent years to determine how to maintain and provide improved wildlife habitat conditions. Carbon County was asked to participate in field trips and some staff discussions and responded to these opportunities for coordination.

While desirable, Carbon County is not a typical affected interest to BLM management plans. Future vehicular access, proposed land uses, and resource management policies can impose significant impacts upon the regional economy of Carbon County, the land use management activities of Carbon County, existing roads, and the related expenditure of County funds for future capital improvements and personnel costs. For this reason, the County envisions that it will be invited to participate in selected facets of more specific BLM planning efforts. Such an approach will facilitate the cooperative use of available information and ensure a more substantive input by Carbon County into the future resource planning activities of BLM.

Land Exchanges

Local ranchers and private landowners have for years promoted the exchange of public and private lands within various parts of Carbon County. These opportunities are especially evident in the “checkerboard” of public and private lands in Carbon County that lie approximately 20 miles north and south of the Union Pacific Railroad corridor. Various private landowners in Carbon County have encouraged and pursued land exchanges with BLM to enable a more efficient consolidation of ranch properties. Such consolidations would improve the cost-effectiveness of ranch operations and, in some cases, improve range health. BLM also believes that the reduction of lands that are interspersed between private and public land ownership will enhance future resource and land management programs of BLM.

Carbon County supports the implementation of future land exchanges in the County to enhance the economic viability of local ranches. To pursue this objective, Carbon County should develop a plan that identifies and assists potential land exchanges desired by private landowners within the County. Public involvement will always be an important criteria that will guide County decisions related to specific land exchange proposals.

Review of Environmental Assessments and Impact Statements

In response to the requirements of the National Environmental Policy Act (NEPA), the Bureau of Land Management prepares categorical exclusions (CX), environmental assessments, and/or more detailed environmental impact statements for a variety of proposed resource and land management actions. Carbon County wishes to continue its receipt of these documents in order that it may provide constructive comment to future land and resource management proposals.

The Board of County Commissioners will remain as the primary point-of-contact with all federal agencies that operate in Carbon County. However, Carbon County desires to have these documents transmitted to, at least, the following agencies:

- Board of County Commissioners;
- Carbon County Planning Commission; and,
- State Conservation Districts.

As stated earlier, consultation with Carbon County is strongly recommended for proposed land exchanges or projects that require the use of County roads, area development plans, and other significant land and resource management actions. However, the continued receipt of environmental assessments and impact statements will ensure that some minimal consultation will occur.

STATE OF WYOMING, GAME AND FISH COMMISSION

General

The Wyoming Game and Fish Commission (WGFC) is an agency of the State of Wyoming. The Commission includes seven members who are appointed by the Governor, confirmed by the Wyoming State Senate, and serve six-year terms.

The State Department of Game and Fish administers and implements the policies and regulations that are established by the Game and Fish Commission. The Department is organized into seven regional management areas. The regional boundaries of these areas are based upon watershed and big game unit boundaries.

The regional management areas are further segregated into specific fish and terrestrial biological management areas.

Carbon County encompasses a portion of four regional management areas. Approximately 24,755 acres of State land within Carbon County are managed by the Wyoming Game and Fish Department. These lands primarily comprise 13 public fishing access areas and five wildlife habitat management areas (Figure 8-1).

No State Game and Fish administrative facility is located in Carbon County. Game and fish personnel, who reside in Carbon County, work from their homes, carry out extensive field activities, and coordinate with other Game and Fish offices via the use of telephone, fax, and the Internet.

General Scope of Authority for Fish and Wildlife Management

The Wyoming Game and Fish Commission and Wyoming Game and Fish Department are charged with the responsibility to provide an adequate and flexible system of control, propagation, management, protection, and regulation of most wildlife in Wyoming. This general authorization and more specific management responsibilities are outlined in Title 23 of the Wyoming State Statutes.

The scope and range of management responsibilities outlined in Title 23 (W.S. 23-1-302) are as follows:

- Fix season and bag limits, as well as open, shorten, or close hunting seasons for wildlife.
- Establish zones and area where trophy game animals may be harvested.
- Acquire lands and waters to:
 - develop, improve, operate, and maintain fish hatcheries, rearing ponds, game farms, and bird farms;
 - manage game animals, protected animals and birds, furbearing animals, game birds, and fish; and,
 - public hunting, fishing, or trapping areas.
- Acquire easements and construct access roads.

**FIGURE 8-1
WYOMING GAME AND FISH DEPARTMENT
FISH AND WILDLIFE MANAGEMENT
AND PUBLIC ACCESS AREAS IN CARBON COUNTY**

FIGURE NOT AVAILABLE

- Sell or exchange lands, water area, or other property that is no longer of any practical use.
- Capture, propagate, transport, buy, sell, or exchange game and furbearing animals, bird, or fish.
- Direct the capture of any wildlife in Wyoming in localities where species are abundant, as well as transport and distribute any wildlife.
- When necessary, kill wildlife in Wyoming, or when wildlife generates substantial damage to property.
- If necessary, make provisions for the feeding of fish and wildlife in selected localities.
- Promote wildlife research;
- Enter into cooperative agreements for wildlife management and demonstration projects.
- Supervise the protection, management, and propagation of fish.
- Grant licenses for the capture and transport of wildlife, nests or eggs of nonpredacious birds.
- Issue licenses.
- Open game reserves for hunting when they are overstocked, or a serious shortage of feed exists.
- Designate the protection of game, predatory, or other species that are not identified in Wyoming Statutes 23-1-101.
- Collect and distribute statistics and information.
- Establish hunter check stations.
- Regulate the use of power vehicles on lands that are administered by the Wyoming Game and Fish Commission.
- Regulate or prohibit the importation of exotic species; small game animals; furbearing animals; game, migratory, and protected birds; and fish into the State of Wyoming.
- Designate individual bison, or herds of bison, as wildlife when approved by the Wyoming Livestock Board.

The scope of these responsibilities and authorities indicate that the Wyoming Game and Fish Department is primarily a game management agency. However, Game and Fish does have the authority to establish fish and wildlife management areas and work cooperatively with other individuals, agencies, and organizations in the management of these resources.

While the primary mission of Game and Fish is to provide a variety of recreational opportunities associated with fish and wildlife resources, the Department recognizes that it is impossible to separate opportunities for the use and enjoyment of fish and wildlife from the maintenance of suitable wildlife habitat. Wild species cannot be effectively maintained outside of a biotic community where these species cannot perform their natural functions (Wyoming Game and Fish Commission, 1994).

Land and Resource Management Concerns of Carbon County

Identification and Monitoring of Wildlife Seasonal Range Areas

In order to make effective land management decisions, Carbon County needs to be aware of land areas that are important to the long-term maintenance of wildlife resources in Carbon County. Otherwise, there is a high probability that important elk, deer, antelope, and furbearer populations in Carbon County will gradually be degraded.

Through discussions with the State Game and Fish Department, the Carbon County Department of Planning and Development has learned that the conservation of “crucial winter range” and “severe winter relief” areas are important to the long-term maintenance of significant wildlife habitat. Seasonal wildlife range areas, which have been mapped on a statewide basis for several decades, are based upon Game and Fish field observations. An annual review of these range areas is made during the preparation of annual herd unit reports.

More recently, this information and other designated seasonal wildlife range areas have been incorporated into a statewide geographical information system (GIS) that is maintained by the Wyoming Game and Fish Department. This digital information has, in turn, been incorporated into the Carbon County geographical information system. The continued maintenance of the Wyoming Game and Fish Department’s GIS will enable the Department to revise seasonal range boundaries when appropriate future data prompts desirable revisions.

In an effort to monitor wildlife populations and evaluate the availability of habitat, the Game and Fish Department annual monitors herd classifications, female/young ratios, and male/female ratios (Rothwell, 1997) in each of its wildlife management areas. This data and other biological information can provide the information necessary to modify seasonal wildlife range maps.

If Carbon County's future land management decisions are to incorporate the consideration of crucial winter range and severe winter relief areas, it is essential that seasonal wildlife range maps are periodically reviewed and updated. Carbon County recommends that the State Game and Fish Department should:

- Review seasonal wildlife range maps on an annual basis following surveys of existing habitat management areas.
- Revise seasonal range maps when survey data and changes in environmental conditions dictate a modification in seasonal range boundaries.
- Any changes in seasonal range maps should be coordinated with the Carbon County Planning Commission and residents of Carbon County.

Available Best Management Practices

Between 1990 and 1996, the State Game and Fish Department prepared and adopted approximately 60 habitat extension bulletins. These bulletins outline specific resource management objectives, habitat requirements, and concise best management practices that are applicable to local ranches, other agricultural areas, and residential areas. In terms of resource management, the potential application of these practices offers a practical resource conservation opportunity that could constructively impact future land uses.

While these documents provide extremely useful and practical information, this information is not promoted or distributed within Carbon County unless requested. Carbon County wants the Game and Fish Department to more aggressively pursue the distribution of this practical information to Carbon County residents.

Carbon County recommends that the Game and Fish Department hold a series of winter educational presentations at various locations in the County. The meetings could be co-sponsored by local conservation districts to encourage greater participation. During these meetings, Game and Fish representatives could make a presentation of selected best management practices and distribute selected habitat extension bulletins. Residents could be provided with the opportunity to ask more specific questions, or request onsite technical assistance.

Future Coordination with State Game and Fish Department

There are three areas of coordination that are needed to facilitate more meaningful coordination of land and resource management decisions with Carbon County. These areas include the following:

- identification of resource management issues and related intra-agency comments regarding individual grazing, oil and gas, and mining permits.
- the identification and/or distribution of other relevant information that is required to support County land and resource management.
- consolidation of Fish and Wildlife management activities into one wildlife management division in Carbon County.

Identification of Resource Management Issues and Recommended Best Management Practices

Through the performance of ongoing field research, biologists from the Game and Fish Department are generally aware of ever-changing trends in fish and wildlife habitat, herd and fish populations, and environmental stresses that impact fish and wildlife in Carbon County. Carbon County believes that this information needs to be periodically conveyed to the Carbon County Planning Commission and Board of County Commissioners.

The Game and Fish Department will desirably make annual presentations concerning the health of fish and wildlife populations and their habitat. In addition, the Department should also be prepared to recommend specific best management practices that can be applied to address specific resource management issues. In the absence of this information, it is extremely difficult for Carbon County to incorporate consideration of resource management issues into applications for rezoning, subdivisions, and special use permits.

At the same time, coordination with the Game and Fish Department should be a “two-way street”. The Carbon County Department of Planning and Development will provide notices to the State Game and Fish Department for any proposed rezoning, subdivision, and special use permit applications. This coordination will enable Game and Fish to provide constructive comments and recommendations concerning projects that may impact fish and wildlife habitat in Carbon County.

The Identification and Distribution of Other Relevant Information to Enhance Local Resource Management

Carbon County is aware that available information is regularly shared with biologists at BLM and the U.S. Forest Service to support resource management decisions. Unfortunately, virtually no information is shared with Carbon County agencies that are also responsible for making land use management decisions that occasionally impact fish and wildlife resources.

Aside from regular annual presentations by local biologists, Carbon County encourages the Game and Fish Department to transmit other available information. For example, the County Planning Commission should receive any updates to crucial seasonal ranges for wildlife. Such information will ideally be transmitted in hardcopy and digitized form to facilitate regular use by the Carbon County Planning Commission. The location of designated seasonal ranges, which were mapped by the Wyoming Game and Fish Department in 1988, has already been provided to the Carbon County Department of Planning and Development.

Consolidation of Fish and Wildlife Management Activities into One Wildlife Management Division in Carbon County

In order to enhance the general public's accessibility to Game and Fish Department services and personnel, Carbon County recommends that State Game and Fish Department consolidate its Carbon County activities into one fish and wildlife management division. Carbon County recommends that this division be located within Carbon County. The location of Game and Fish personnel within the County will also facilitate future coordination with Carbon County, as well as the delivery of services to the general public.

Carbon County also recommends that the Governor appoint one State Game and Fish Commissioner to represent Carbon County. Carbon County provides a significant source of license fees to the State Game and Fish Commission because of the extensive use of the County for recreational hunting. Consequently, management issues and the level of recreational participation warrant a greater representation of Carbon County.

STATE CONSERVATION DISTRICTS

General

There are 30 State conservation districts in the State of Wyoming. The districts are further segregated into five regional areas. Area IV contains nine conservation districts. Three of the nine districts in Area IV are located in Carbon County. These districts include:

- Saratoga-Encampment-Rawlins District;
- Medicine Bow District; and,
- Little Snake River District.

The 30 conservation districts are generally guided by the State Board of Agriculture. The Board of Agriculture has statutory responsibility to:

- coordinate the overall programs of all conservation districts,
- recommend the appropriate of State funds for the activities of the conservation districts,
- disseminate information relating to conservation district programs and activities, and
- resolve any inter-agency conflicts concerning resource conservation programs.

Five district supervisors manage each conservation district. Two of the supervisors must be landowners in their respective conservation district; the remaining three supervisors are required to be residents of the district.

Statutory Authority and Responsibilities

The scope of powers and duties of the conservation districts is outlined in Title 11, Chapter 16 of the Wyoming Statutes. The statutory authority of the districts primarily includes the following responsibilities:

- conduct surveys, investigations, research, and distribute information concerning range management, soil erosion characteristics, flood control, and water conservation;
- conduct demonstration projects on lands within the district;
- carry out preventative control measures and improvements associated with range management, the growth of grasses or other vegetation, and changes in land use;
- cooperate, or enter into agreements with any governmental or private agency, landowner or other residents of lands with the district;
- make available agricultural and engineering equipment, fertilizer, seeds and seedlings, male breeding animals, livestock supplies, and other material or equipment;
- develop comprehensive plans for range improvement and stabilization, soil and water conservation, and flood control;
- present plans and information to landowners and residents in the district;
- act as a representative for local groups in dealing with the United States, or its representatives, in soil or water conservation matters.
- operation that receive benefits; and,
- require landowners and residents of lands to enter into agreements that promote soil and water conservation, as well as flood control practices.

Land and Resource Management Concerns of Carbon County

Community Involvement in Local Resource Management

Local ranchers primarily manage resource management on private lands in Carbon County. Ranchers can also obtain some technical assistance from Natural Resource Conservation Service representatives who are based in Saratoga and Baggs.

The Little Snake River Conservation District (LSRCD) is very active. This district aggressively provides technical support to various ranchers in the Little Snake River area for improvements in range management, flood control, and related soil and water conservation. In addition, LSRCD regularly seeks federal funds to carry out specific demonstration projects and education programs that promote soil and water conservation, flood control, as well as the development and enhancement of wildlife habitat. The success of the LSRCD was highlighted by its receipt of national recognition by the Clinton Administration in 1996.

The Saratoga-Encampment-Rawlins District has also completed various programs. Examples of past and ongoing programs include:

- Began a range land monitoring program in 1993 to enable ranchers to make more informed decisions concerning grazing systems.

- Initiated performance of a water quality monitoring program along the North Platte River drainage in 1995.
- Encouraged passage of a mil levy to provide permanent funding for the district.
- Completed a survey of the amount of forage available within the district and Carbon County.
- Obtained federal grant monies that will be used to help reduce the amount of sedimentation into Sage Creek and improve the fisheries habitat of the North Platte River.

Similarly, the Medicine Bow Conservation District has also been involved in both range land monitoring and the monitoring of water quality along selected portions of the North Platte River drainage (Barnes, 1998). In addition, the District provides technical assistance to area ranchers.

Future program efforts should continue to emphasize direct technical assistance and coordination with local ranchers and other residents of Carbon County. Carbon County believes that some of the resource management decisions by the U.S. Forest Service and the Bureau of Land Management are influenced by the lack of resource management efforts on private lands. Many federal agency decisions that impact grazing permits and allotment management plans are based upon procedural permit requirements and stipulations, rather than the encouragement of best management practices. Local technical assistance programs and activities that encourage the use of best management practices can fill this occasional void in resource management. This effort should be accomplished primarily by the three State conservation districts in Carbon County.

All three of the conservation districts in Carbon County are supported, in part, by a special one-mil levy. The levies for each district were authorized by a majority of voters in past elections, e.g., Saratoga-Encampment-Rawlins District in 1996. Past voter support for these levies suggest that Carbon County residents desire a greater participation of the conservation districts in local resource management.

Watershed Planning

Each of the three conservation districts in Carbon County have completed long-range plans that identify general mission statements, goals, planning issues, and proposed district activities. While useful, more specific plans are needed to better identify specific issues, specific approaches for the encouragement of best management practices, and resource conservation opportunities. Such plans should also provide information, e.g., land use suitability, that will facilitate ongoing land management activities of the Carbon County Planning Commission.

Carbon County recommends that the preparation of more specific plans should be made on a watershed basis. In September, 1995, the Wyoming Association of Conservation Districts (WACD) unanimously approved a resolution to “...initiate the development of a strategic plan to assist Districts in taking the lead in watershed efforts.” Subsequently, the WACD established a task force to complete a watershed strategic plan that was published in late 1996. The WACD task force recommended that the components of a typical watershed plan should include:

- best management practices,
- fisheries habitat management,
- flood control,
- irrigation water management,
- land use planning,
- mapping,
- natural issues and concerns,
- public education and public meetings,
- rangeland monitoring,
- recreation planning and management,
- stream assessments and riparian area monitoring,
- water quality monitoring, and
- wildlife habitat management.

Carbon County envisions that the watershed plans will, in part, be a reflection of the more general recommendations that are contained in the Carbon County Land Use Plan. The identification of more specific watershed issues, management objectives, and district activities will also enable the County Planning Commission to help support some of the conservation district objectives and programs.

Future Coordination with Carbon County

Coordination of Grazing Permit Actions with State Conservation Districts, County Agricultural Extension Agent, and Natural Resource Conservation Service

Many ranchers prefer to work directly with the Bureau of Land Management concerning changes in stipulations concerning existing grazing permits. However, Carbon County envisions that the State Conservation Districts, i.e., Little Snake River, Saratoga-Encampment-Rawlins, and Medicine Bow, the County Agricultural Extension agent, and local Natural Resource Conservation Service (NRCS) representative will take a more aggressive role to ensure more effective coordination with Carbon County livestock ranchers and a balanced consideration of resource conservation issues. Carbon County desires that these agencies will:

- receive notices of proposed revisions to individual grazing permit stipulations, proposed allotment management plans, and proposed permit cancellations;
- evaluate proposed modifications to existing grazing permits, allotment management plans associated with a new permit, or a proposed permit cancellation;
- discuss BLM proposals with a representative(s) of the affected ranch; and,
- if desired by the affected rancher and/or BLM, participate in a joint meeting between ranch representative(s), BLM, the County Extension agent, the State Conservation District, and the local NRCS representative to discuss and mediate any unresolved issues.

Watershed Planning and the Relationship to the County Land Use Plan

Carbon County needs to be a participant in the development of future watershed plans for each conservation district. The Conservation Districts and Carbon County will benefit if these plans are consistent with the County Land Use Plan. Further, there will be planning issues identified in the watershed plans that will likely involve some supportive actions by the County Planning Commission and the Board of County Commissioners.

After these plans are completed and adopted by each of three Conservation Districts in Carbon County, the County will review the content of the watershed plans from each District, share any potential concerns, and recommend possible revisions to the plans. Assuming that the revised plans are acceptable to the County, the County Planning Commission and Board of Commissioners will adopt a resolution that indicates that the watershed plans are a more detailed expression of resource management plans of Carbon County.

Using this approach, the future resource management policies and directions of Carbon County will become clearer to federal and State agencies. It will also will help establish a more substantive, working relationship with the Conservation Districts in Carbon County.

Technical Assistance to New Landowners in the County

As the population of Carbon County changes, there will be an increased influx of new landowners with considerably less knowledge of agriculture and rural living. It is important that the County Department of Planning and Development cooperate with the Conservation Districts to advise new landowners of potential land use constraints and resource conservation opportunities.

Cooperative Efforts to Review Future Land and Resource Management Proposals by Federal Agencies

It is also expected that federal agencies such as BLM and the U.S. Forest Service will continue to examine and propose future changes regarding how federal lands can be used by ranchers, other residents of Carbon County, and industries that are based in Carbon County. Carbon County views

that its input to these decisions should be made in cooperation with district supervisors and technical staff from the three Conservation Districts in Carbon County.

CARBON COUNTY PLANNING COMMISSION

General

The Carbon County Planning Commission serves at the pleasure of the Carbon County Board of Commissioners. The commission includes five volunteer members. At least three of its members must reside in the unincorporated area of Carbon County. The remaining members can reside in municipalities in the County.

The Planning Commission is supported by staff that administers zoning matters and performs regional planning activities on a day-to-day basis.

Statutory Authority and Responsibilities

The authority for planning and zoning in Carbon County is actually vested in the Board of County Commissioners which, for the most part, reviews and considers recommendations from the County Planning Commission. The planning and zoning authority that is granted to the Board of County Commissioners is outlined in Title 18, Chapter 5 of the Wyoming Statutes. This statute generally provides the following powers and duties:

- enforce zoning resolutions to restrict and control the use of lands in unincorporated areas of the County;
- adopt recommendations that temporarily freeze building and land uses in unincorporated areas of the County without public notice and hearings;
- review and process subdivision applications; and,
- adopt or amend a comprehensive plan that may be prepared by the Planning Commission after, at least, one public hearing.

Land and Resource Management Concerns

Land Use Zoning: the Primary Tool for Future Land Management

The administration of existing land use zoning in Carbon County is authorized and guided by Carbon County's Zoning Resolution, of 1972. A resolution for land use zoning was adopted since Wyoming counties are not authorized to establish local ordinances.

The 1972 Zoning Resolution contains five zoning designations:

- ranching, agriculture, and mining (RAM);
- residential development (RD);
- retail business (RB);
- highway business (HB); and,
- industrial (I).

The uses permitted in each of these districts are summarized in Tables 8-1 through 8-5. Permitted and accessory uses can be made after a person has obtained a building permit from the Carbon County Department of Planning and Development. Special permit uses require the approval of the County Planning Commission.

The administration of the 1972 Zoning Resolution has generally been an effective tool for managing the development of private lands in Carbon County. Zoning is most effective and usually receives greater public support when it is applied with consistent determinations.

**TABLE 8-1
PERMITTED LAND USES
RANCHING-AGRICULTURE-MINING (R-A-M) DISTRICT**

Permitted Uses	Special Permit Uses	Accessory Uses
General commercial ranching, agriculture, farming, and their related residences, uses and facilities and animal husbandry relative to above activities	Airports and radio transmitting stations	Customary accessory structures and uses
Churches and Sunday schools	Institutions, rest rooms, hospitals, clinics	Signs
Public parks and playgrounds	Public buildings and schools	Home professional office, home occupations, and private swimming pools
Cemeteries	Public facilities and utilities limited to above ground structures including sewage treatment and water supply facilities, sanitary land fill operations, substations, distribution and regulator stations and overhead electrical transmission lines of over 69,000 volts - all conforming to State Health Department requirements.	Boarding or lodging house
Ore beneficiation, milling, and quarrying with proof of state permit. Said operations if above ground are not permitted within 1,000 feet of an RD District.	Membership clubs	
Oil, gas, and mineral exploration, development, and production	Automobile trailer courts	
Logging	Public and commercial recreation areas and facilities, including fishing ponds and campgrounds	
Buried underground utility lines and facilities, and overhead electrical transmission lines of 69,000 volts or less	Construction camps, processing plants, and related facilities	
Fishing and hunting lodge development, bed & breakfast establishments, ranch recreation, and dude ranch enterprises	Commercial wind farms that consist of wind towers or other appurtenant items that will be used for the resale of energy to power companies	
Highway and street construction, camps, gravel mines, processing plants, and other related facilities		

Note: This table is a general summary of the zoning regulations. More specific definitions of authorized land uses can be found in the Carbon County Zoning Resolution of 1972.

Source: Carbon County Board of Commissioners, Carbon County Zoning Resolution of 1972, 1972

TABLE 8-2 PERMITTED LAND USES RESIDENTIAL (RD) DISTRICT		
Permitted Uses	Special Permit Uses	Accessory Uses
Single family, duplex, and multiple dwelling units	Planned unit development	Customary accessory structures and uses
Crop, garden, and non-commercial livestock uses	Mobile home parks	Signs
Churches and Sunday schools	Day care centers	Home professional office, home occupation, and swimming pool
Cemeteries	Hospitals	
Public parks and playgrounds	Public utilities limited to above ground structures, including sewage treatment and water supply facilities, sanitary land fill, substations, distribution and regulator stations	
Public schools	Membership clubs	
One horse for each resident	Boarding or lodging houses	
	Nursing, rest, and convalescent homes	
	Livestock uses	

Note: This table is a general summary of the zoning regulations. More specific definitions of authorized land uses can be found in the Carbon County Zoning Resolution of 1972.

Source: Carbon County Board of Commissioners, Carbon County Zoning Resolution of 1972, 1972

TABLE 8-3 PERMITTED LAND USES RETAIL BUSINESS (RB) DISTRICT		
Permitted Uses	Special Permit Uses	Accessory Uses
Retail store or shop	Automotive filling station	Customary accessory uses and structures
Business center development (enclosed with no outdoor sales or storage)	Car washing facilities	
Office building for financial institution, real estate or insurance office, professional services such as lawyer, doctor, dentist, studio or agency; medical office buildings, or hospital	Bus passenger station	Accessory off-street parking and loading
Barber shop, beauty shop, self-service laundry, dry cleaning establishment, or pick-up agency, tailor or dressmaking shop, or other personal service shop	Public utility building, structure, or facility	Signs
General appliance servicing and appliance repair shop	Overhead electrical transmission lines of over 69,000 volts	
Restaurant, cafe, tavern, or other place serving food and beverage	Hotels and motels	
Membership club, theater, churches	Funeral parlor	
Day care centers, nursing, rest and convalescent homes	Single family residence when used by owner or manager on the same retail site	
Buried underground utility lines and overhead electrical transmission lines of 69,000 volts or less		

Note: This table is a general summary of the zoning regulations. More specific definitions of authorized land uses can be found in the Carbon County Zoning Resolution of 1972.

Source: Carbon County Board of Commissioners, Carbon County Zoning Resolution of 1972, 1972

**TABLE 8-4
PERMITTED LAND USES
HIGHWAY BUSINESS (HB) DISTRICT**

Permitted Uses	Special Permit Uses	Accessory Uses
Any use permitted in the Retail Business District	Mining	Customary accessory uses and structures
Hotels, motels and lodges, tourist lodges	Warehouse, distribution center, terminal	Accessory off-street parking and loading
Automotive service station	Lumber yard	Signs
Repair garage	Drive-in theater	
Repair shop and similar type uses	Travel trailer court, mobile home or trailer courts	
	Printing and publishing establishments	
	Any use, building, or structure in area classified as a scenic corridor	
	Single family residence only when used by owner or manager on the same site	

Note: This table is a general summary of the zoning regulations. More specific definitions of authorized land uses can be found in the Carbon County Zoning Resolution of 1972.

Source: Carbon County Board of Commissioners, Carbon County Zoning Resolution of 1972, 1972

**TABLE 8-5
PERMITTED LAND USES
INDUSTRIAL (I) DISTRICT**

Permitted Uses	Special Permit Uses	Accessory Uses
Industrial mining and manufacturing or industrial park which is not obnoxious, toxic, hazardous or offensive by reason of the emission of dust, smoke, fumes, gas, odors or noise beyond the I District area boundaries	Any use in RB and HB districts that support industrial facilities and activities	Customary accessory uses and structures
Ranching and agriculture	Sand or gravel pit	Accessory off-street parking and loading
Non-nuisance industry	Junk yard, dumps, and sanitary landfill	Signs
Any use for railroad transportation purpose. Use for a railroad transportation purpose shall include, but shall not be limited to, railroad tracks (including industrial and spur tracks) and related operating maintenance and repair facilities (including bridges, supply warehouse, fueling facilities, loading or unloading ramps, cranes, yards, communication and signal systems, shops and other maintenance facilities).	Industrial mining or manufacturing that may be offensive via the emission of dust, smoke, fumes, gas, odors, or noise	

Note: This table is a general summary of the zoning regulations. More specific definitions of authorized land uses can be found in the Carbon County Zoning Resolution of 1972.

Source: Carbon County Board of Commissioners, Carbon County Zoning Resolution of 1972, 1972

The use of zoning by Carbon County will continue to be the primary implementation tool associated with land management of the unincorporated areas of the County. Performance standards will continue to be used in conjunction with stipulations that are required by the County Planning Commission for special use permits and rezoning proposals.

Residential Land Uses in RAM Districts

All lands in the County were initially zoned RAM in 1971 when the original County zoning resolution was adopted. If proposed land uses were different than those permitted under the RAM District, an applicant would seek approval for a proposed rezone to another, more appropriate zoning designation.

Between 1972 and 1996, various planning directors and technical staff have supported the activities of the Carbon County Planning Commission. Similarly, members of the Planning and Commission have changed over this period. Different Commission members and staff have brought differing views and interpretations concerning this zoning designation.

More recently, the County Planning Commission has interpreted that a single-family residence is not permitted in the RAM district unless it supports commercial ranching, agriculture, or mining activities. This interpretation is consistent with specific permitted uses outlined in the 1972 Zoning Resolution.

The gradual influx of new residents to Carbon County and changing lifestyles are generating increased demand for residential uses on abandoned or marginal rangelands in various parts of the Carbon County. Undeveloped rural properties continue to be an aspiration of many homebuyers. However, most of these buyers seek a rural lifestyle that is not accompanied by a commercial ranching or agricultural operation. As a result, the Carbon County Department of Planning and Development is processing a growing number of rezone applications that propose to change an existing RAM designation to Residential (RD).

Livestock Uses

One of the important objectives and functions of zoning is to provide reasonable expectations to prospective buyers, adjoining landowners, and other residents concerning how a given property or land area in the County can and will be used in the future. For example, most prospective buyers of real estate in the County would not seek to buy a property and build a home immediately adjacent to a large industrial complex.

Many of the incoming buyers of property are coming from more urbanized communities in North America. Where zoning is used, a "residential" designation usually suggests an area where single family and duplex residential facilities may be constructed. Residential-zoned areas typically do not include non-commercial livestock uses, e.g., pigs, that frequently are viewed as unacceptable to many urban residents.

It is recommended that an amendment to the 1972 Zoning Resolution be made to clarify the use of livestock in residential, ranch-agricultural-mining districts, and other zoning districts. Such an amendment may require the modification of existing permitted use definitions, the potential establishment of another zoning designation, or other types of amendments.

Special Permit Uses

Various special permit uses allowed in the Residential District reflect the types of land uses that, in some cases, may generate future land use conflicts, e.g., increased noise, traffic. The generation of potential land use conflicts may be diminished through the establishment of a new "Public or Community Facilities" zoning designation. This zoning designation would generally permit hospitals, day care centers, schools, recreational areas, airports, and facilities associated with public utilities.

Semantics Associated with the 1972 Zoning Resolution

The 1972 Zoning Resolution represents an effective tool for zoning administration in Carbon County. However, the semantics used in the Zoning Resolution are now 25 years old and need to be revised to better reflect existing and potential land uses. This minor modification will only increase the usefulness of the Zoning Resolution in future years.

Need to Amend the 1972 Zoning Resolution

In view of the preceding issues, the County Planning Commission will make a detailed review of the 1972 Zoning Resolution and prepare a set of recommended amendments for review by the general public and the Board of County Commissioners. Proposed amendments may include the incorporation of new zoning districts for "Rural Living", "Public or Community Facilities", and others.

Division of Larger Land Tracts

The division of larger properties in Carbon County is becoming more prevalent. The increase is a reflection of various factors.

Some larger ranches are selling portions of their privately-owned lands. A sizeable number of ranches also continue to be divided.

Carbon County's primary concern relates to changes in land uses on parcels that are greater than 35 acres in size. The formation of these larger land tract divisions may be exempt from review by Carbon County.

Public inquiries from across the United States confirm the demand for rural, undeveloped properties for residential uses and non-commercial agricultural activities. At the same time, it is anticipated that remote "lone wolf" subdivisions will generate increased public demands for County and State services, e.g., road maintenance and schools, as these areas become more developed and populated.

Such demands will increase the cost of public services that are provided by County and State agencies. Unfortunately, increased demands for public services will not be countered by a proportional increase in County governmental revenues unless the incoming residential population is accompanied with increased industrial growth and/or new primary employers in the Carbon County economy.

Unless Carbon County has the statutory authority to address the potential impacts associated with these divisions, future land uses in Carbon County will only follow consumer demand and price. Carbon County supports changes in State statutes that would enable county government to review all new land divisions in Carbon County. Without changes in State statutes, future land splits in Carbon County will likely scatter low-density residential development to some remote areas in the County that are not suitable for future residential development. Such development pattern will likely generate, at least, the following consequences:

- increase the scope and cost of public services;
- create potential vehicular access conflicts;
- impose undesirable impacts upon public lands;
- increase the cost of electrical power services from private utilities;
- encourage new residential development in areas that may be unsuitable for residential development, e.g., lack of adequate groundwater supplies;
- decrease scenic views in unincorporated areas of the County; and,
- generate potential impacts upon wildlife.

Carbon County shall encourage future residential development of larger land tracts that are in the immediate vicinity of the 10 municipalities in Carbon County. This approach will enable local municipalities to gain a greater number of connections to municipal water and sewer services that can help sustain long-term operation and maintenance, as well as occasional system expansions.

Building Codes

The County Planning Commission believes that steps should be made to ensure the long-term quality of construction in Carbon County. In order to pursue this objective, the Planning Commission desires to adopt a set of relevant building, electrical, plumbing, and HVAC standards that can be used and followed by building contractors and owner-builders.

The City of Rawlins and the Town of Saratoga have prepared such standards for the same purpose. The Planning Commission desires to adopt these standards that will provide a guide to future development. Such standards will provide guidance that is frequently requested by both contractors and local residents.

The enforcement of local building codes cannot be accomplished without the establishment of a related building inspection process. Since operational funds are limited, the County Planning Commission initially to seek public compliance with any adopted building standards on a voluntary basis. Should future random inspections suggest that this approach is not practical, other enforcement measures will be evaluated.

Geographical Information System for Carbon County

The Carbon County Planning Commission developed a geographical information system (GIS) for Carbon County during the preparation of the revised Land Use Plan. The GIS was established using ArcView 3.0 software which is manufactured by ESRI. ArcView is a popular, simplified version of the well-known ArcInfo software.

Geographical information systems have become increasingly valuable to regional land use planning efforts. GIS enables users to visually correlate various coverages, or layers of digital information; store, retrieve, and filter selected information from databases; and the evaluate development alternatives. A variety of other applications continue to made by various software manufacturers such as ESRI.

In order to ensure the availability of this valuable planning tool, financial resources will need to be allocated by the Board of County Commissioners to ensure the long-term maintenance, update, and application of the software. Future expenditures are required to support labor, training, hardware, supplies, and other direct costs.

There are a few options that Carbon County should consider:

- establish and maintain in-house capabilities, hardware, and software to operate and maintain a GIS for Carbon County;
- retain a locally-based consulting firm to maintain and update a GIS for Carbon County; and,
- establish a shared GIS system between locally-based industries and Carbon County.

Establish and Maintain In-House Capabilities

One option will be for the County to establish and maintain in-house labor capabilities, software, hardware, and printing equipment. ArcView and other GIS software is primarily being developed by private enterprise in the United States. This development of GIS is changing rapidly and significant changes are occurring in the design and use of GIS software. Another version of ArcView, ArcView 4.0, is presently being designed; a technical committee for a subsequent version has already been designated by ESRI (Varner, 1997).

In the face of these rapid changes, Carbon County would be faced with the cost for labor, frequent training, and frequent changes in software and hardware. However, these costs would be countered by access to GIS mapping products that have already been completed by the U.S. Bureau of Land Management. BLM recently offered to share digital information with Carbon County.

Retain Local Consulting Services

A second option is for Carbon County to retain the services of a locally-based consulting firm to provide GIS services. The day-to-day use of a GIS by Carbon County will be limited. However, significant planning issues will periodically arise that will prompt the use of their GIS system. These uses will be irregular in nature. Consequently, it may be practical to employ the services of a firm that already has ArcView software and is willing to provide occasional services on an hourly basis. It is also important that the consultant firm be situated within Carbon County to facilitate the coordination of periodic information and mapping requests.

Establish and Share a GIS for Industry and Carbon County

The Carbon County Coalition recently recommended the establishment of a GIS that would be financed and shared by locally-based industries and Carbon County. The financial participation of industry would enable Carbon County to reduce its annual expenditures into maintenance and use of the system.

At the same time, the shared use of the system by industry and Carbon County would require the GIS to be adaptable to varying information requirements. This approach would require some detailed discussions with representatives of the timber, mining, ranching, as well as oil and gas industries to determine, at least, the following:

- potential levels of interest;
- potential financial commitments of available labor, computer hardware, software, and printer equipment;
- type, scale, and level of accuracy associated with desired information;
- frequency of information needs; and,
- desired operating policies associated with the distribution of public and proprietary information.

The use of a locally-based consulting firm might also facilitate the maintenance and access to a shared GIS for Carbon County and local industries in Carbon County. Under this concept, a selected representative, or consultant, could report to a committee that represents all interested parties.

Future Revisions to the Carbon County Land Use Plan

The Carbon County Land Use Plan will need to be periodically updated approximately every five years to:

- keep abreast of significant changes in the environment, economy, land uses, resident population, and infrastructure that may impact future land and resource management activities of Carbon County;
- adjust, if necessary, the focus for future land and resource management activities, as well as related coordination with appropriate State and federal agencies;
- provide a technical basis for the evaluation of future rezoning and subdivision requests;
- guide the County's evaluation and support of future economic development opportunities; and,
- keep Carbon County residents abreast of pertinent information and provide continued opportunities for input into future land and resource management activities.

Carbon County envisions that these revisions will be accomplished via staff and/or consulting support.

Land use plans are of little use unless they are applied to the County's land use and resource management activities. Planning Commission members and staff support understandably change. However, Carbon County should exert every effort to sustain existing industries with a specific focus for future land and resource management.